



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/519,782

02/06/2006

Michael Souza

2003CIPPCT

2989

31108

7590

02/25/2008

PAUL J. SUTTON, ESQ., BARRY G. MAGIDOFF, ESQ.  
GREENBERG TRAURIG, LLP  
200 PARK AVENUE  
NEW YORK, NY 10166

EXAMINER

NEGRON, ISMAEL

ART UNIT

PAPER NUMBER

2885

MAIL DATE

DELIVERY MODE

02/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,782	<b>Applicant(s)</b> SOUZA ET AL.	
	<b>Examiner</b> ISMAEL NEGRON	<b>Art Unit</b> 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-26 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's preliminary amendment filed on February 21, 2006 has been entered. Claims 7, 17, 21 and 25 have been amended. Claims 1-6 have been cancelled. No claim has been added. Claims 7-26 are still pending in this application, with claims 7, 18-24 and 26 being independent.

### ***Abstract***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

3. Claim 20 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 19. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. **Claims 7-17** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 (respectively) of U.S. Patent No. 6,824,296 (SOUZA et al.) in view of RUSKOUSKI (U.S. Pat. 5,655,830).

5. SOUZA et al. teaches all the limitations of the claims, except the lamp of the patented device being an LED coupled to a power circuit including a resistor, a diode and a capacitor, such power circuit being adapted to be connected to a source of AC voltage (as recited in Claim 1).

6. RUSKOUSKI discloses a light ting device including:

- **a lamp (as recited in Claim 1)**, Figure 1, reference number 15;
- **the lamp including a light emitting diode (as recited in Claim 1)**, Figure 2, reference number 38;
- **a power supply circuit (as recited in Claim 1)**, as seen in Figure 2;

- **the power supply circuit including a resistor (as recited in Claim 1), Figure 2, reference number 40;**
- **the power supply circuit including a diode (as recited in Claim 1), Figure 2, reference number 38;**
- **the power supply circuit including a capacitor (as recited in Claim 1), Figure 2, reference number 55;**
- **the resistor, diode and capacitor being connected in series (as recited in Claim 1), as seen in Figure 2;**
- **the power supply circuit being adapted to be connected to a source of AC voltage (as recited in Claim 1), column 5, lines 60-63; and**
- **the value of the current in the series circuit being determined by the value of the impedance of the resistor in series with the capacitor (as recited in Claim 1), as evidenced by Figure 2.**

7. The examiner takes Official Notice that the use of LEDs is old and well known in the illumination art, as evidenced by RUSKOUSKI. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the light source in the patented device of SOUZA et al. with the LED of RUSKOUSKI. One would have been motivated since LEDs are recognized in the illumination art to have many desirable advantages, including reduced size, high efficiency, low power consumption, long life, resistance to vibrations, faster reaction times, and low heat production, over other light sources.

8. Claims 24 and 25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,824,296 (SOUZA et al.) in view of RUSKOUSKI (U.S. Pat. 5,655,830).

9. SOUZA et al. teaches all the limitations of the claims, except the lamp of the patented device being an LED coupled to a power circuit including a resistor, a diode and a capacitor, such power circuit being adapted to be connected to a source of AC voltage (as recited in Claim 1).

10. RUSKOUSKI discloses a light ting device including:

- **a lamp (as recited in Claim 24)**, Figure 1, reference number 15;
- **the lamp including a light emitting diode (as recited in Claim 24)**, Figure 2, reference number 38;
- **a power supply circuit (as recited in Claim 25)**, as seen in Figure 2;
- **the power supply circuit including a resistor (as recited in Claim 25)**, Figure 2, reference number 40;
- **the power supply circuit including a diode (as recited in Claim 25)**, Figure 2, reference number 38;
- **the power supply circuit including a capacitor (as recited in Claim 25)**, Figure 2, reference number 55;
- **the resistor, diode and capacitor being connected in series (as recited in Claim 25)**, as seen in Figure 2;

- **the power supply circuit being adapted to be connected to a source of AC voltage (as recited in Claim 25),** column 5, lines 60-63; and
- **the value of the current in the series circuit being determined by the value of the impedance of the resistor in series with the capacitor (as recited in Claim 25),** as evidenced by Figure 2.

11. The examiner takes Official Notice that the use of LEDs is old and well known in the illumination art, as evidenced by RUSKOUSKI. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the light source in the patented device of SOUZA et al. with the LED of RUSKOUSKI. One would have been motivated since LEDs are recognized in the illumination art to have many desirable advantages, including reduced size, high efficiency, low power consumption, long life, resistance to vibrations, faster reaction times, and low heat production, over other light sources.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.



12. **Claims 18 and 23** are rejected under 35 U.S.C. 102(b) as being anticipated by RUSKOUSKI (U.S. Pat. 5,655,830).

13. RUSKOUSKI discloses a power supply circuit for an LED, such circuit including:

- **a resistor (as recited in claims 18 and 23)**, Figure 2, reference number 40;
- **a first diode (as recited in claims 18 and 23)**, Figure 2, reference number 38;
- **a first light emitting diode (as recited in claims 18 and 23)**, Figure 2, reference number 38;
- **a capacitor (as recited in claims 18 and 23)**, Figure 2, reference number 55;
- **the resistor, first diode, first light emitting diode (LED) and capacitor being connected in series (as recited in claims 18 and 23)**, as seen in Figure 2;
- **the power supply circuit being adapted to be connected to a source of AC voltage (as recited in claims 18 and 23)**, column 5, lines 60-63;
- **the value of the current in the series circuit being determined by the value of the impedance of the resistor in series with the capacitor (as recited in Claim 18)**, as evidenced by Figure 2;
- **a second diode (as recited in claims 18 and 23)**, Figure 2, reference number 38;

- **a second light emitting diode (as recited in claims 18 and 23),**  
Figure 2, reference number 38;
- **the second diode and second light emitting diode (LED) being**  
**connected in series (as recited in Claim 23),** as seen in Figure 2;
- **the second diode and LED being connected in parallel with the**  
**first diode and LED, but in reverse polarity (as recited in Claim**  
**23),** as seen in Figure 2;
- **the first diode being connected to block negative half waves**  
**(as recited in Claim 23),** as evidenced by Figure 2; and
- **the first diode and LED and the second diode and LED lighting**  
**alternately on each half of an AC wave (as recited in Claim 23),**  
as evidenced by Figure 2.

14. **Claims 19 and 20** are rejected under 35 U.S.C. 102(b) as being anticipated by ANDERSON (U.S. Pat. 5,575,459).

15. ANDERSON discloses a power supply circuit for an LED, such circuit including:

- **a capacitor (as recited in claims 19 and 20),** Figure 2, reference  
number 10;
- **an LED (as recited in claims 19 and 20),** Figure 2, reference  
number 2;

- **a diode (as recited in claims 19 and 20), Figure 2, reference number 2;**
- **the LED and the diode being coupled in parallel but in reverse polarity (as recited in claims 19 and 20), as seen in Figure 2;**
- **a resistor coupled in series with the LED and diode (as recited in claims 19 and 20), Figure 2, reference number 11;**
- **the power supply circuit being adapted to be connected to a source of AC voltage (as recited in claims 18 and 23), as seen in Figure 2;**
- **the diode blocking AC current when its polarity is such that the LED is reversed biased (as recited in claims 18 and 23), as evidenced by Figure 2.**

16. Regarding the impedance of the capacitor being selected to limit the current in the LED, the applicant is advised that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ 964, (Fed. Cir. 1985). In this case, the cited limitations failed to distinguish the claimed structure from the patented circuit of ANDERSON. See MPEP § 2113

17. **Claim 21** is rejected under 35 U.S.C. 102(b) as being anticipated by JOHNSON (U.S. Pat. 5,463,280).

18. JOHNSON discloses a power circuit for an LED, such circuit having:

- **a capacitor (as recited in Claim 21)**, Figure 1, reference number 20;
- **a resistor in series with the capacitor (as recited in Claim 21)**, inherent, as the electrical connection between the capacitor and the source necessarily includes a resistive element;
- **a bridge rectifier (as recited in Claim 21)**, Figure 1, reference number 22;
- **the bridge rectifier having first and second input terminals (as recited in Claim 21)**, as seen in Figure 1;
- **the bridge rectifier having first and second output terminals (as recited in Claim 21)**, as seen in Figure 1;
- **the first input terminal being coupled to the capacitor (as recited in Claim 21)**, as seen in Figure 1;
- **the capacitor and the second input terminal being adapted to be connected to a source of AC potential (as recited in Claim 21)**, as seen in Figure 1;
- **a light emitting diode (as recited in Claim 21)**, Figure 1, reference number 16;

- **the light emitting diode (LED) being connected across the first and second output terminals (as recited in Claim 21), as seen in Figure 1; and**
- **the bridge rectifier rectifying the AC potential to provide DC current to the LED (as recited in Claim 21), as evidenced by Figure 1.**

19. **Claim 22** is rejected under 35 U.S.C. 102(b) as being anticipated by MADADI et al. (U.S. Pat. 5,688,042).

20. MADADI et al. discloses a power circuit for an LED, such circuit having:

- **a capacitor (as recited in Claim 22), Figure 9, reference number 16;**
- **a bridge rectifier (as recited in Claim 22), Figure 9, reference number 28;**
- **the bridge rectifier having first and second input terminals (as recited in Claim 22), as seen in Figure 9;**
- **the bridge rectifier having first and second output terminals (as recited in Claim 22), as seen in Figure 9;**
- **the first input terminal being coupled to the capacitor (as recited in Claim 22), as seen in Figure 9;**

- **the capacitor and the second input terminal being adapted to be connected to a source of AC potential (as recited in Claim 22), as seen in Figure 9;**
- **a resistor (as recited in Claim 22), Figure 9, reference number 29;**
- **a light emitting diode (as recited in Claim 22), Figure 9, reference number 26;**
- **the resistor being in series with the light emitting diode (as recited in Claim 22), as seen in Figure 9;**
- **the resistor and light emitting diode (LED) being connected across the first and second output terminals (as recited in Claim 22), as seen in Figure 9;**
- **the resistor limiting the in rush current (as recited in Claim 22), as evidenced by Figure 9; and**
- **the bridge rectifier rectifying the AC potential to provide DC current to the LED (as recited in Claim 22), as evidenced by Figure 9.**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2885

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over

ANDERSON (U.S. Pat. 5,575,459).

22. ANDERSON discloses a power supply circuit for an LED, such circuit including:

- **a resistor (as recited in Claim 26)**, Figure 2, reference number 11;
- **a diode (as recited in Claim 26)**, Figure 2, reference number 2;
- **an LED (as recited in Claim 26)**, Figure 2, reference number 2;
- **a circuit element (as recited in Claim 26)**, Figure 2, reference number 10;
- **the resistor, LED and circuit element being connected in series (as recited in Claim 26)**, as seen in Figure 2;
- **the circuit being adapted to be connected to a source of AC potential (as recited in Claim 26)**, as seen in Figure 2; and
- **the value of the current in the circuit being determined by the value of the impedance of the resistor in series with the circuit element (as recited in Claim 26)**, as evidenced by Figure 2.

23. ANDERSON discloses all the limitations of the claim, except the circuit element being an inductor (as recited in Claim 26).

24. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use an inductor as the circuit element of the patented power supply of ANDERSON, since the Examiner takes Official Notice of the use of an inductor in a power supply circuit being old and well known in the art. In this case, selecting a specific circuit element, such as the claimed inductor, would have flowed naturally to one of ordinary skill in the art as necessitated by the specific requirements of a given application.

#### ***Relevant Prior Art***

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Richardson** (U.S. Pat. 3,795,830), **Smallegan** (U.S. Pat. 3,968,355), **Yamuro** (U.S. Pat. 5,155,669), **Malita** (U.S. Pat. 5,388,357), **Victor** (U.S. Pat. App. Pub. 2002/0030991), **Leen** (U.S. Pat. 6,709,126), **Guerrieri et al.** (U.S. Pat. App. Pub. 2004/0095763) and **Burdick** (U.S. Pat. App. Pub. 2004/0246704) disclose illumination devices including LEDs and power supply circuit adapted for connecting the LED to an AC power source.

#### ***Conclusion***

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-



Art Unit: 2885

2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee, can be reached on (571) 272-7044. The facsimile machine number for the Art Group is (571) 273-8300.

27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

/Ismael Negron/  
Patent Examiner  
AU 2885